

Recommended Immunization Schedule for Children and Adolescents Aged 18 Years or Younger, UNITED STATES, 2018

- Consult relevant ACIP statements for detailed recommendations (www.cdc.gov/vaccines/hcp/acip-recs/index.html).
- When a vaccine is not administered at the recommended age, administer at a subsequent visit.
- Use combination vaccines instead of separate injections when appropriate.
- Report clinically significant adverse events to the Vaccine Adverse Event Reporting System (VAERS) online (www.vaers.hhs.gov) or by telephone (800-822-7967).
- Report suspected cases of reportable vaccine-preventable diseases to your state or local health department.
- For information about precautions and contraindications, see www.cdc.gov/vaccines/hcp/acip-recs/general-recs/contraindications.html.

The table below shows vaccine acronyms, and brand names for vaccines routinely recommended for children and adolescents. The use of trade names in this immunization schedule is for identification purposes only and does not imply endorsement by the ACIP or CDC.

| Vaccine type | Abbreviation | Brand(s) |
|---|----------------------|--|
| Diphtheria, tetanus, and acellular pertussis vaccine | DTaP | Daptacel Infanrix |
| Diphtheria, tetanus vaccine | DT | No Trade Name |
| <i>Haemophilus influenzae</i> type B vaccine | Hib (PRP-T) | ActHIB Hiberix PedvaxHIB |
| | Hib (PRP-OMP) | Havrix Vaqta |
| Hepatitis A vaccine | HepA | Engerix-B Recombivax HB |
| Hepatitis B vaccine | HepB | Engerix-B Recombivax HB Gardasil 9 |
| Human papillomavirus vaccine | HPV | Multiple |
| Influenza vaccine (inactivated) | IIV | Multiple |
| Measles, mumps, and rubella vaccine | MMR | M-M-R II |
| Meningococcal serogroups A, C, W, Y vaccine | MenACWY-D | Menactra Menveo |
| | MenACWY-CRM | Bexsero Trumenba |
| Meningococcal serogroup B vaccine | MenB-4C MenB-FHbp | Prenvar 13 |
| Pneumococcal 13-valent conjugate vaccine | PCV13 | Pneumovax |
| Pneumococcal 23-valent polysaccharide vaccine | PPSV23 | IPOL |
| Poliovirus vaccine (inactivated) | IPV | Rotarix RotaTeq |
| Rotavirus vaccines | RV1 RV5 | Adacel Boostrix |
| Tetanus, diphtheria, and acellular pertussis vaccine | Tdap | Tenivac No Trade Name |
| Tetanus and diphtheria vaccine | Td | Varivax |
| Varicella vaccine | VAR | DTaP-HepB-IPV Pediarix |
| Combination Vaccines | | |
| DTaP, hepatitis B and inactivated poliovirus vaccine | DTaP-IPV/Hib | Pentacel |
| DTaP, inactivated poliovirus and <i>Haemophilus influenzae</i> type B vaccine | DTaP-IPV | Kinrix Quadracel |
| Measles, mumps, rubella, and varicella vaccines | MMRV | ProQuad |

Approved by the

Advisory Committee on Immunization Practices
(www.cdc.gov/vaccines/acip)

American Academy of Pediatrics
(www.aap.org)

American Academy of Family Physicians
(www.aafp.org)

American College of Obstetricians and Gynecologists
(www.acog.org)

This schedule includes recommendations in effect as of January 1, 2018.

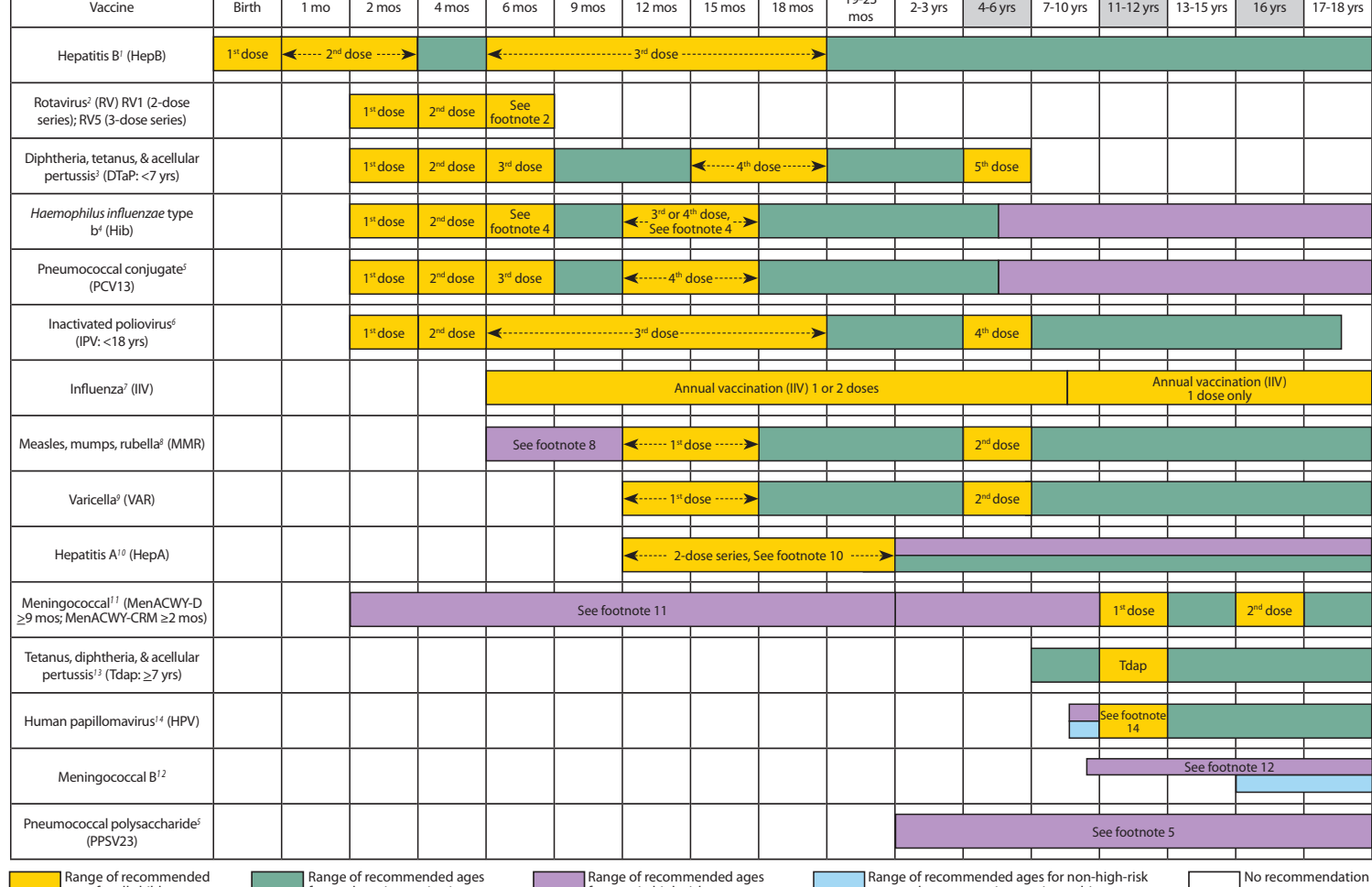


U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

Figure 1. Recommended Immunization Schedule for Children and Adolescents Aged 18 Years or Younger—United States, 2018.

(FOR THOSE WHO FALL BEHIND OR START LATE, SEE THE CATCH-UP SCHEDULE [FIGURE 2]).

These recommendations must be read with the footnotes that follow. For those who fall behind or start late, provide catch-up vaccination at the earliest opportunity as indicated by the green bars in Figure 1. To determine minimum intervals between doses, see the catch-up schedule (Figure 2). School entry and adolescent vaccine age groups are shaded in gray.



NOTE: The above recommendations must be read along with the footnotes of this schedule.

Figure 2. Catch-up immunization schedule for persons aged 4 months–18 years who start late or who are more than 1 month behind—United States, 2018.

The figure below provides catch-up schedules and minimum intervals between doses for children whose vaccinations have been delayed. A vaccine series does not need to be restarted, regardless of the time that has elapsed between doses. Use the section appropriate for the child's age. Always use this table in conjunction with Figure 1 and the footnotes that follow.

| Vaccine | Minimum Age for Dose 1 | Children age 4 months through 6 years | | | |
|--|---|---|---|--|--|
| | | Dose 1 to Dose 2 | Dose 2 to Dose 3 | | Dose 3 to Dose 4 |
| Hepatitis B ¹ | Birth | 4 weeks | 8 weeks and at least 16 weeks after first dose. Minimum age for the final dose is 24 weeks. | | |
| Rotavirus ² | 6 weeks Maximum age for first dose is 14 weeks, 6 days | 4 weeks | 4 weeks ² Maximum age for final dose is 8 months, 0 days. | | |
| Diphtheria, tetanus, and acellular pertussis ³ | 6 weeks | 4 weeks | 4 weeks | | 6 months |
| Haemophilus influenzae type b ⁴ | 6 weeks | 4 weeks if first dose was administered before the 1 st birthday. 8 weeks (as final dose) if first dose was administered at age 12 through 14 months. No further doses needed if first dose was administered at age 15 months or older. | 4 weeks ⁴ if current age is younger than 12 months and first dose was administered at younger than age 7 months, and at least 1 previous dose was PRP-T (ActHib, Pentacel, Hiberix) or unknown. 8 weeks and age 12 through 59 months (as final dose) ⁴ • if current age is younger than 12 months and first dose was administered at age 7 through 11 months; OR • if current age is 12 through 59 months and first dose was administered before the 1 st birthday, and second dose administered at younger than 15 months; • if both doses were PRP-OMP (PedvaxHIB; Comvax) and were administered before the 1 st birthday. No further doses needed if previous dose was administered at age 15 months or older. | | 8 weeks (as final dose) This dose only necessary for children aged 12 through 59 months who received 3 doses before the 1 st birthday. |
| Pneumococcal conjugate ⁵ | 6 weeks | 4 weeks if first dose administered before the 1 st birthday. 8 weeks (as final dose for healthy children) if first dose was administered at the 1 st birthday or after. No further doses needed for healthy children if first dose was administered at age 24 months or older. | 4 weeks if current age is younger than 12 months and previous dose given at <7 months old. 8 weeks (as final dose for healthy children) if previous dose given between 7-11 months (wait until at least 12 months old); OR if current age is 12 months or older and at least 1 dose was given before age 12 months. No further doses needed for healthy children if previous dose administered at age 24 months or older. | | 8 weeks (as final dose) This dose only necessary for children aged 12 through 59 months who received 3 doses before age 12 months or for children at high risk who received 3 doses at any age. |
| Inactivated poliovirus ⁶ | 6 weeks | 4 weeks ⁶ | 4 weeks ⁶ if current age is < 4 years 6 months (as final dose) if current age is 4 years or older | | 6 months ⁶ (minimum age 4 years for final dose). |
| Measles, mumps, rubella ⁸ | 12 months | 4 weeks | | | |
| Varicella ⁹ | 12 months | 3 months | | | |
| Hepatitis A ¹⁰ | 12 months | 6 months | | | |
| Meningococcal ¹¹ (MenACWY-D ≥9 mos; MenACWY-CRM ≥2 mos) | 6 weeks | 8 weeks ¹¹ | See footnote 11 | | See footnote 11 |
| Children and adolescents age 7 through 18 years | | | | | |
| Meningococcal ¹¹ (MenACWY-D ≥9 mos; MenACWY-CRM ≥2 mos) | Not Applicable (N/A) | 8 weeks ¹¹ | | | |
| Tetanus, diphtheria, and acellular pertussis ³ | 7 years ¹³ | 4 weeks | 4 weeks if first dose of DTaP/DT was administered before the 1 st birthday. 6 months (as final dose) if first dose of DTaP/DT or Tdap/Td was administered at or after the 1 st birthday. Routine dosing intervals are recommended. ¹⁴ | | 6 months if first dose of DTaP/DT was administered before the 1 st birthday. |
| Human papillomavirus ¹⁴ | 9 years | 6 months | | | |
| Hepatitis A ¹⁰ | N/A | 4 weeks | | | |
| Hepatitis B ¹ | N/A | 4 weeks | 8 weeks and at least 16 weeks after first dose. | | |
| Inactivated poliovirus ⁶ | N/A | 4 weeks | 6 months ⁶ A fourth dose is not necessary if the third dose was administered at age 4 years or older and at least 6 months after the previous dose. | | A fourth dose of IPV is indicated if all previous doses were administered at <4 years or if the third dose was administered <6 months after the second dose. |
| Measles, mumps, rubella ⁸ | N/A | 4 weeks | | | |
| Varicella ⁹ | N/A | 3 months if younger than age 13 years. 4 weeks if age 13 years or older. | | | |

NOTE: The above recommendations must be read along with the footnotes of this schedule.

Figure 3. Vaccines that might be indicated for children and adolescents aged 18 years or younger based on medical indications

| VACCINE ▼ | INDICATION ► | Pregnancy | Immunocompromised status (excluding HIV infection) | HIV infection CD4+ count [*] | | Kidney failure, end-stage renal disease, on hemodialysis | Heart disease, chronic lung disease | CSF leaks/cochlear implants | Asplenia and persistent complement deficiencies | Chronic liver disease | Diabetes |
|---|--------------|-----------|--|--|--|--|-------------------------------------|-----------------------------|---|-----------------------|----------|
| | | | | <15% or total CD4 cell count of <200/mm ³ | ≥15% or total CD4 cell count of ≥200/mm ³ | | | | | | |
| Hepatitis B ¹ | | | | | | | | | | | |
| Rotavirus ² | | | SCID* | | | | | | | | |
| Diphtheria, tetanus, & acellular pertussis ³ (DTaP) | | | | | | | | | | | |
| Haemophilus influenzae type b ⁴ | | | | | | | | | | | |
| Pneumococcal conjugate ⁵ | | | | | | | | | | | |
| Inactivated poliovirus ⁶ | | | | | | | | | | | |
| Influenza ⁷ | | | | | | | | | | | |
| Measles, mumps, rubella ⁸ | | | | | | | | | | | |
| Varicella ⁹ | | | | | | | | | | | |
| Hepatitis A ¹⁰ | | | | | | | | | | | |
| Meningococcal ACWY ¹¹ | | | | | | | | | | | |
| Tetanus, diphtheria, & acellular pertussis ¹³ (Tdap) | | | | | | | | | | | |
| Human papillomavirus ¹⁴ | | | | | | | | | | | |
| Meningococcal B ¹² | | | | | | | | | | | |
| Pneumococcal polysaccharide ⁵ | | | | | | | | | | | |

 Vaccination according to the routine schedule recommended
 Recommended for persons with an additional risk factor for which the vaccine would be indicated
 Vaccination is recommended, and additional doses may be necessary based on medical condition. See footnotes.
 No recommendation
 Contraindicated
 Precaution for vaccination

*Severe Combined Immunodeficiency
[†]For additional information regarding HIV laboratory methods and use of live vaccines; see the General Best Practice Guidelines for Immunization "Altered Immunocompetence" at: www.cdc.gov/vaccines/hcp/acip-recs/general-recs/immunocompetence.html; and Table 4-1 (footnote D) at: www.cdc.gov/vaccines/hcp/acip-recs/general-recs/contraindications.html.

NOTE: The above recommendations must be read along with the footnotes of this schedule.

